

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A method of delivering a nucleic acid molecule into a mammalian eye, the method comprising contacting a scleral surface of the eye with a nucleic acid molecule having a molecular weight no greater than 150 kDa such that the nucleic acid passes through the sclera and into the interior of the eye.
2. (Previously Presented) The method of claim 1, wherein the nucleic acid has a molecular weight of at least 70 kDa.
3. (Previously Presented) The method of claim 2, wherein the nucleic acid has a molecular weight of at least 100 kDa.
4. (Previously Presented) The method of claim 3, wherein the nucleic acid has a molecular weight of at least 120 kDa.
5. (Previously Presented) A method of delivering a nucleic acid molecule into a mammalian eye, the method comprising contacting a scleral surface of the eye with a nucleic acid molecule having a molecular radius of at least 0.5 nm and a molecular weight no greater than 150 kDa so that the nucleic acid passes through the sclera and into the interior of the eye.
6. (Previously Presented) The method of claim 5, wherein the nucleic acid has a molecular radius of at least 3.2 nm.
7. (Previously Presented) The method of claim 5, wherein the nucleic acid has a molecular radius of at least 6.4 nm.
8. (Previously Presented) The method of claim 1 or 5, comprising the additional step of thinning the sclera prior to contacting the scleral surface with the nucleic acid.
9. (Previously Presented) The method of claim 8, wherein the sclera has a thickness less than 70% of its pre-thinned thickness.

10. (Previously Presented) The method of claim 9, wherein the sclera has a thickness less than 60% of its pre-thinned thickness.

11. (Previously Presented) The method of claim 1 or 5, wherein the nucleic acid is contacted with said sclera together with means for facilitating the transport of the nucleic acid through the sclera.

12. (Previously Presented) The method of claim 1 or 5, wherein the nucleic acid is delivered into contact with the scleral surface by a pump.

13. (Previously Presented) The method of claim 12, wherein the pump is a mechanical or osmotic pump.

14. (Previously Presented) The method of claim 1 or 5, wherein the nucleic acid is delivered into contact with the scleral surface by a microchip.

15. (Previously Presented) The method of claim 1 or 5, wherein the mammal is a human.

16. (Previously Presented) The method of claim 1 or 5, wherein the method is used to treat a retinal or choroidal disease.

17. (Previously Presented) The method of claim 16, wherein the retinal or choroidal disease is selected from the group consisting of macular degeneration, diabetic retinopathy, retinitis pigmentosa and other retinal degenerations, retinal vein occlusions, sickle cell retinopathy, glaucoma, choroidal neovascularization, retinal neovascularization, retinal edema, retinal ischemia, proliferative vitreoretinopathy, and retinopathy of prematurity.

18. (Previously Presented) The method of claim 1 or 5, wherein the nucleic acid molecule is a purified nucleic acid molecule.

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)